AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows.   This listing of claims will replace all prior listings.

1.   (PREVIOUSLY PRESENTED)   A method of computer control of an HVAC system comprising the steps of:

(1)   inferring whether a stage of an HVAC component is a failed stage from a relationship between the temperature of the controlled area and a time period; and

(2)   removing the failed stage detected in said step (1) from a staging sequence.

2.   (ORIGINAL)   A method as recited in claim 1, wherein said step (1) further comprises the step of:

communicating a health status of the HVAC component to a controller.

3.   (ORIGINAL)   A method as recited in claim 1, wherein said step (1) further comprises the step of:

determining whether a communication link exists between the HVAC component and a controller.

4.   (ORIGINAL)   A method as recited in claim 1, wherein said step (1) further comprises the step of:

communicating a temperature of a controlled area to a controller.

5.   (CANCELED)

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6.   (PREVIOUSLY PRESENTED) A method of computer control of an HVAC system comprising the steps of:

(1)   inferring whether a stage of an HVAC component is a failed stage by:

(a)   monitoring a temperature of a controlled area;

(b)   ′ monitoring a slope of the relationship between the temperature of the controlled area and the time period

(c)   inferring whether the stage has failed from a relationship between the temperature of the controlled area and a time period; and

(2)   removing the failed stage detected in said step (1) from a staging sequence.

7.   (PREVIOUSLY PRESENTED) A method of computer control of an HVAC system comprising the steps of:

(1)   inferring whether a stage of an HVAC component is a failed stage;

(a)   monitoring a temperature of a controlled area;

(b)   monitoring a rate of change of a relationship between the temperature of the controlled area and the time period.

(c)   inferring whether the stage has failed from a relationship between the temperature of the controlled area and a time period; and

(2)   removing the failed stage detected in said step (1) from a staging sequence.

8.   (ORIGINAL) A method as recited in claim 1, further comprising the steps of:

(a)   periodically attempting communication with the failed stage;

(b)   identifying whether the failed stage has become functional; and

(c)   returning the failed stage to the staging sequence in response to said step (b).

9.   (ORIGINAL) A method as recited in claim 8, wherein said step (b) further comprising the step of:

(i)   identifying a positive communication with the failed stage.

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10.   (PREVIOUSLY PRESENTED)   A method of computer control of an HVAC system comprising the steps of:

(1)   monitoring a rate of change of a relationship between a temperature of a controlled area and a time period for a first stage of an HVAC component;

(2)   determining whether the first stage is a failed stage in response to said step (1); and

(3)   removing the failed stage determined in said step (2) from a staging sequence.

11.   (ORIGINAL)   A method as recited in claim 10, wherein said step (1) further comprises the step of:

determining whether the rate of change is greater than a prior rate of change of a prior stage of the HVAC component.

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12.   (PREVIOUSLY PRESENTED)   A method of computer control of an HVAC system comprising the steps of:

(1)   monitoring a rate of change of a relationship between a temperature of a controlled area and a time period for a first stage of an HVAC component and comparing the rate of change to a stored rate of change for the first stage;

(2)   determining whether the first stage is a failed stage in response to said step (1); and

(3)   removing the failed stage determined in said step (2) from a staging sequence.

13.   (ORIGINAL) A method as recited in claim 12, further comprises the step of:
inputting the stored rate of change into a controller which communicates with the HVAC component.

14.   (ORIGINAL) A method as recited in claim 12, further comprises the step of:
learning the stored rate of change over a multiple of cycles of the first stage.

15.   (ORIGINAL) A method as recited in claim 14, further comprises the step of:
determining a configuration of the HVAC component in response to learning the stored rate of change of a multiple of stages comprising the first stage.

16.   (ORIGINAL) A method as recited in claim 14, further comprises the step of:
incorporating a gain into a control algorithm for the first stage in response to the stored rate of change to obtain a desired rate of change.

17.   (ORIGINAL) A method as recited in claim 14, further comprises the step of:
relating a recovery time period to the stored rate of change to achieve a designated temperature at a desired time.

18.   (PREVIOUSLY PRESENTED)   A method of computer control of an HVAC system comprising the steps of:

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(1) monitoring a first rate of change of a first relationship between a temperature of a controlled area and a first time period for a first stage of an HVAC component;

(2) monitoring a second rate of change of a second relationship between the temperature of the controlled area and a second time period for a second stage of the HVAC component;

(3) determining whether the second stage is a failed stage in response to said steps (1) and (2); and

(4) removing the failed stage determined in said step (3) from a staging sequence.

19. (ORIGINAL) A method as recited in claim 18, further comprises the step of:
determining a configuration of the HVAC component in response to said steps (1) and (2).

20. (ORIGINAL) A method as recited in claim 18,wherein said step (3) further comprises the step of:
determining if the second rate of change is less than the first rate of change; and
determining that the second stage is a failed stage.

21. (CANCELLED)

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